



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Fabrice Billarant

Serial N°.: 10/688,483

Filed: October 17, 2003

Title: MOULDED-OVER ARTICLE WITH A SMALL BAND COMPRISING HOOKS

Examiner: Ruth C. Rodriguez

Attorney Docket N°.:CAC.P0033

**DECLARATION OF Fabrice Billarant**

I, Fabrice Billarant, hereby declares as follows:

I am the inventor in the above identified application, and I am currently a manager at APLIX, a French based company specialized in the manufacture of hooks and loops fasteners. I am more particularly in charge of the development of the fasteners in the automotive field, in particular fasteners which are overmoulded to a foam moulded object such as an automotive seat cushion, and have been working in this field for more than 15 years and have been the designated inventor of US granted patents in the field.

I have conducted a test as described below:

Identical pedestals were waxed and preheated for 30 minutes at a temperature of 220°F. This operation ensured that the foam poured into the mould did not stick to the pedestals. After cleaning excess wax, the pedestals were installed in the bottom of a rectangular mould. Once installed, the pedestals formed the cavity at the bottom of the mould to protect the hooks as described in the above patent application.

Two overmoulds as recited in the above application were prepared and each placed on one of the pedestals.

The first overmould had a total width of 12,2 mm, including a central region having a width of 6 mm and two ledge regions having a width each of 3.1 mm each. Therefore, the width of the central region was less than the sum of the two ledge region widths.

The second overmould had a total width of 9 mm, including a central region of 6 mm and two ledge regions having a width each of 1.50 mm. Therefore, the width of the central region was more than the sum of the two ledge region widths.

Then foam (MDI/TDI blended Polyurethane with a density of 40-45 kg/m<sup>3</sup> and a range of indexes from 90 to 105) was poured at a moulding temperature of 65°C and under a pressure of 1.2 bar.

The results are shown in the below pictures 1 (first overmould) and 2 (second overmould).

Picture 1



Picture 2



As can be seen, the hooks in the first overmould were left intact after pouring while for the second overmould, the hooks were contaminated by some foam that intruded into the cavity.

I further declare that all statements made herein of my own knowledge are true and that all statements made herein on information are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Made in Le Cellier on the 29<sup>th</sup> of October 2009

Fabrice Billarant